

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/012418

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H05K13/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H05K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 11 307991 A (MEIWA KK) 5 November 1999 (1999-11-05)	1,5,13
A	abstract; figures 4,7,9	2,8,16
A	US 2003/049109 A1 (YMAN) 13 March 2003 (2003-03-13)	1,2,5, 7-9, 12-18,20
	paragraph '0028!; figure 2	
A	JP 2000 091790 A (YAMAHA MOTOR CO LTD) 31 March 2000 (2000-03-31)	1,2,5,8, 13,16
	abstract; figures 2-4	

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

24 February 2005

Date of mailing of the international search report

07/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Bolder, G

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/012418

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 11307991	A	05-11-1999	NONE	
US 2003049109	A1	13-03-2003	SE 521891 C2 EP 1423997 A1 SE 0103001 A WO 03024180 A1	16-12-2003 02-06-2004 08-03-2003 20-03-2003
JP 2000091790	A	31-03-2000	NONE	

BEST AVAILABLE COPY